

REMARKS

Claims 1-11 are all the claims pending in the application.

PRIOR ART REJECTIONS

The Examiner has rejected claims 1, 3-7 and 9-11 under 35 U.S.C. § 102(e) as being anticipated by Shioda et al. (U.S. Patent No. 6,813,508). Applicant traverses these rejections because Shioda et al. fails to disclose or suggest all of the claim limitations. Specifically, Shioda et al. fails to disclose or suggest at least the following limitations:

Claim 1:

a first locating means, which, *based on a received level of a signal transmitted from said base station, locates a direction to a location of said base station*; and

a second locating means, which, *based on said direction located by said first locating means and said angle calculated by said calculation means, locates a direction to said target position.*

Claim 7:

a directional antenna and a strength indicator, which, *based on a received level of a signal transmitted from said base station, locate a direction to a location of said base station*;

a calculation section, which, based on said base station position information and current mobile telephone position information, and position information input for the target position, calculates an angle formed between a line joining said current position and said base station and a line joining said current mobile telephone position and said target position, and *based on said located direction and said calculated angle, locates a direction to said target position.*

Claims 1 and 7 require a first locating means (claim 1) and a directional antenna and strength indicator (claim 7), which, *based on a received level of a signal transmitted from said base station, locates a direction to a location of said base station.* Shiodo et al. does not locate

a direction to a location of a base station based on a received level of a signal from the base station. Rather, as shown below, col. 2, lines 53-61 discloses that the directions to the base stations in Shiodo is determined by an arithmetic calculation.

The mobile communication apparatus according to the present invention selects any one of a plurality of base stations to communicate therewith, the apparatus comprising: ... carries out an arithmetic operation for obtaining a direction of each of the base stations as a direction of a vector with an initial point thereof at a point represented by the present location data and a terminal point thereof at a point represented by a retrieved base station location data of each of the base stations, the direction of the vector being defined as a base station deflection angle which is an angle between the vector and the axis of the coordinate system; ...(emphasis added)

In addition, in Shioda et al., the direction to the target position is not *based on said direction located by said first locating means and said angle calculated by said calculation means*. Rather, as shown below, col. 4, lines 50-58, the direction to the target position is based on the destination data DOB and the present location.

The traveling direction estimating section 15 carries out estimation of a direction in which the user is going to travel (a traveling direction) by deriving a deflection angle θ_m on the basis of the destination data DOB supplied from the operation portion 18 and the present location data $R(x, y)$ stored in the present location storing section 14. The estimation data D_m representing the derived deflection angle θ_m is supplied to the candidate base station selecting section 16. (emphasis added)

In response, the Examiner argues that “Shioda et al. teaches the selector carries out further arithmetic operation weighting a value of the electric field strength of a signal received from each surrounding base stations with the weighting coefficient of a corresponding surrounding based station to provide a weighted electric field strength of each of the extracted

surrounding base station.” The Examiner also asserts that when the mobile station selects a particular base station, the mobile station selects the corresponding direction of the base station.

Applicant disagrees with the Examiner’s application of Shiodo et al. to the claim. Shioda et al. may obtain the electric field strength of the base stations (step 78) and select base stations in part based on field strength (S79). However, the direction to the location of the base station is not based on the field strength, as is required by the claim. Rather, as discussed above, the direction is based solely on an arithmetic calculation (see also S74).

Regarding dependent claims 3-6 and 9-11, they should be allowable at least based on their dependence from claims 1 or 7 for at least the same reasons described above. In addition, regarding claims 3, although Shioda et al. discloses measuring field strength, it does so to select a base station suitable for communication. The calculation of a field strength has nothing to do with determining a direction to the base station. See e.g., col 7, lines 34-47.

The candidate base station selecting section 16 further carries out an operation to weight the electric field strength of each of the surrounding base stations with the result of the previous arithmetic operation for the weighting coefficient (step S78: multiplies the electric field strength value by the weighting coefficient) to thereby select a base station suited for communication. That is, a base station with a higher weighted electric field strength that is weighted by the weighting coefficient is selected as being of higher priority. To the selected base station with a higher priority, the portable information apparatus is connected (step S79) for a followed normal communication or handover. Each of the above process of steps S71 to S79 is repeated at a specified time interval. (emphasis added).

In addition, regarding claims 5, 6, 10 and 11, none of the portions of Shioda et al. cited by the Examiner (col. 2, lines 37-67; col. 5, lines 1-67 and col. 7, lines 3-32) disclose a base station transmitting its own location to a mobile station. Rather, the base station location is stored in the map data storing section 17. See e.g., col. 5, lines 13-18.

The Examiner has rejected claims 2 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Shioda et al. in view of the previously cited Takeshi (JP 10-281801). Applicant traverses these rejections because Shioda et al. fails to disclose or suggest all of the claim limitations and there would have been no motivation to combine the display feature of Takeshi with the system of Shioda et al. Applicant first notes that Takeshi fails to make up for the deficiencies of Shioda et al. described above.

Next, the Examiner asserts that it would have been obvious to one of ordinary skill in the art to modify the device of Shioda et al. by adding features in order to enhance a second locating means to include a display that shows a direction in order to increase the efficiency of the communication system as taught by Takeshi. Applicant respectfully disagrees. The object of Shioda et al. is to reduce the number of unnecessary handovers as a mobile stations travels. See e.g., col. 2, lines 8-11. Adding a display that shows a direction to the Shioda et al. device would do nothing to meet the objectives of the Shioda et al. device.

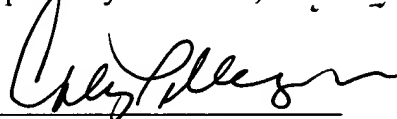
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. § 1.116
USSN: 09/982,817

Q66668

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Carl J. Pellegrini
Registration No. 40,766

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: September 8, 2005